



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

**North Carolina Board of Transportation
Environmental Planning and Policy Committee
Meeting Minutes for August 1, 2007**

A meeting of the Environmental Planning and Policy Committee (EPPC) was held August 1, 2007 at 8:30 AM in the Board Room (Room 150) of the Transportation Building. Board Member Nina Szlosberg chaired the meeting. Other Board of Transportation members who attended were:

Tom Betts
Conrad Burrell
Bob Collier

Marion Cowell
Nancy Dunn
Doug Galyon

Cam McRae
Andrew Perkins

Other attendees included:

Bradley Bennett
Greg Burns
Jack Cahoon
Roberto Canales
Terry Canales
Glenn Dennison
Marshall Dobson
Jennifer Garifo
Lisa Glover
Larry Goode
Rob Hanson
Dave Henderson
Mike Holder
Julie Hunkins

Tim Johnson
Berry Jenkins
Brandon Jones
Daniel Keel
Lori Kroll
Matt Lauffer
Andy McDaniel
Beth McKay
Ehren Meister
Mike Mills
Barry Moose
Ken Murphy
Sandy Nance
Beth Neely

Mike Pettyjohn
Allen Pope
Bill Rosser
Joel Setzer
John Sharp
Robin Smith
Kathleen Stahl
Jay Swain
Beth Thomas
Greg Thorpe
Lucy Wallace
Marcus Wilner
Lance Winslow

Chairperson Nina Szlosberg called the meeting to order at 8:30 AM. She opened by accepting a motion to approve the meeting minutes from the July 11, 2007 committee meeting. The minutes were approved as presented.

Ms. Szlosberg introduced the first agenda item, an update on the Jordan Lake nutrient strategy. She started by giving a brief introduction on the history of this topic and noted that this conversation is a follow up to a previous agenda item. Ms. Szlosberg introduced Dr. Greg Thorpe, Manager of the Project Development and Environmental Analysis Branch, NC Department of Transportation

(NCDOT), and Robin Smith, Assistant Secretary at the Department of Environment and Natural Resources (DENR), to discuss the latest information on the Jordan Lake rule-making process.

Dr. Thorpe opened by noting that the public comment period has been extended to mid-September and the Department continues to be in discussion with DENR on the issues and potential solutions. The two departments have met twice and plan to return to the Board to discuss potential recommendations at the September meeting. The discussions continue to revolve around the difference in estimates of the fiscal costs. The Division of Water Quality (DWQ) has stated that their costs are a range. NCDOT's estimates are relatively conservative and only refer to what the NCDOT must do to achieve compliance to the proposed rules. DWQ's estimations include additional implementation items beyond providing Best Management Practices (BMPs) within the right of way. The total range of costs has been estimated between \$80 million and \$600 million. The final cost will not be known until the implementation plan is agreed upon.

Dr. Thorpe commented that one potential solution proposed by DWQ is the "co-mingled drainage solution." This is where NCDOT would construct larger BMPs that would service larger areas of runoff from other types of development rather than small project BMPs specific to DOT facilities. The Department is still not sure of the ramifications and issues involved with this proposed solution and are working to identify what these are. Dr. Thorpe further detailed what a BMP is and may entail. He noted that BMPs are constructed devices in the field that assist with the management of storm water runoff.

Dr. Thorpe noted that the Hydraulics Unit has engaged the Attorney Generals (AG's) office in discussions of the potential legal issues involved with the co-mingle drainage solution and expects guidance soon. He noted that the AG's office will only provide informal comments and no formal guidance due to time constraints. Dr. Thorpe elaborated on some of the many legal questions that the NCDOT currently has on the proposed solution.

Dr. Thorpe commented that NCDOT did attend both public hearings facilitated by DWQ in July. He noted that comments came from local government, industry and private citizens. Board Member Thomas Betts asked about the extent of the comments provided during the hearings. Dr. Thorpe noted that the tone of the comments at the Carrboro hearing came from citizens and were generally in favor of the proposed rules. The Elon hearing was largely represented by local governments and the tone of the comments revolved around concerns on the potential costs. Board of Transportation Chairman Doug Galyon noted that the local governments in that area are very concerned with the proposed rules. Board Member Betts concurred with Mr. Galyon.

Dr. Thorpe noted that DWQ has requested the Department to propose some alternative language on other proposed solutions. Dr. Thorpe noted that this is a positive move forward and believes alternative solutions can be developed that should be pursued. The next meeting with DWQ to discuss the new proposed language is on August 13. He noted that there is an internal plan to develop the draft language to proposed to DENR, and Board Members will be included in this discussion. The extension of the public comment period allows NCDOT to take more time for their review. He further noted that the language will be discussed with the EPPC in September.

Ms. Szlosberg asked about the Department's alternative analysis and the targets for reductions. She noted that this was one of the core philosophical differences between NCDOT and DWQ. Dr. Thorpe noted that one of NCDOT's concerns continues to be that there has not been a detailed analysis of NCDOT's contribution of nutrients. He noted the NCDOT has collected data but there is some concern on how representative this data may be. He noted that the group will propose to continue to collect data until a sufficient amount of data has been collected and then to perform a more specific analysis of NCDOT's contribution. The next step would be to develop an implementation plan on how to address the specific sources identified in the detailed analysis. This additional data gathering and modeling could be completed within a year of the adoption of the rules.

Ms. Szlosberg asked for clarification on whether the discussion of "contribution" includes indirect and cumulative impacts. Dr. Thorpe responded that only direct impacts would be proposed to be analyzed -- only runoff that comes off of NCDOT road facilities.

Mr. Galyon asked whether NCDOT would be able to identify what percentage of the nutrient intake would be coming from north of Jordan Lake or from the southern portions near the dam (Haw River). Dr. Thorpe responded that the Department is collecting data directly from NCDOT roadways and referred to Andy McDaniel (Hydraulics Unit, NCDOT) for clarification. Mr. McDaniel confirmed that NCDOT will be able to identify the percentage and directional source of the intake from the data collected.

Board Member Bob Collier asked whether the analysis will look at how NCDOT can reduce its contribution as well as how to deal with it. Dr. Thorpe noted that there is a statewide NPDES storm water program that currently aims to reduce the Department's overall contribution. He noted that a proposed plan should further address the sources. Overall there needs to be a more cost-effective plan for the Department to implement than currently has been proposed.

Ms. Szlosberg asked if there has been any further discussion on the proposed percentage of NCDOT's reduction. Dr. Thorpe noted that it continues to be 35% for all contributors. He further noted that there are large contributors and others that contribute less. He noted that this emphasizes the need to collect more data and to perform a detailed analysis to determine what NCDOT must reduce to address the problem.

Ms. Szlosberg introduced DENR Assistant Secretary Robin Smith to discuss DENR and DWQ's perspective. Ms. Smith noted that the main points have already been addressed by Dr. Thorpe. She commented that after consideration, the public comment period was extended until September 15 to allow for more discussion on the draft rules. She noted that on-going conversations continue to occur on the proposed draft rules.

Ms. Smith noted that DENR originally thought that the proposed approach (co-mingle drainage) would be a good and cost-effective way for NCDOT to reach its reduction. DWQ does understand that there are a number of concerns by NCDOT and that the Attorney General's office is currently reviewing them. She noted that DWQ has requested and will consider other alternative solutions proposed by NCDOT. One other possible way to achieve a reduction is to develop a list of appropriate storm water management practices (or BMPs) that NCDOT would be required to

implement. If the agreed upon reasonable number was implemented then NCDOT would have achieved the desired reduction goal. She also noted that DWQ has no desire for NCDOT to spend money that is not cost effective in justifying the benefits received. Therefore, DWQ is open to looking at alternatives other than the original regional approaches. She emphasized that the conversations between the two departments are continuing.

Mr. Betts asked whether DWQ is in agreement that the contributors should pay an equal amount to the percentage of what they actually contribute. Ms. Smith noted that this has not necessarily been discussed because it's been based on a uniform reduction for the same reasons Dr. Thorpe discussed earlier. She noted that if a large contributor was required to reduce by 35%, this might not be effective because that large contributor may be contributing far greater amounts, when NCDOT may be contributing far lesser amounts. She noted that larger nutrient contributors will still be held accountable for reductions. She noted that discussions have really been focused on how to "translate" the reductions to expectation rather than to change the percentage. Therefore, different agencies may have different requirements to meet their reduction needs.

Ms. Szlosberg asked what would happen if NCDOT achieved their required measures but still did not achieve the reduction goal of 35%. Ms. Smith noted that one possibility would be to actually include in the rules a statement that NCDOT will have met the goals of 35% by achieving the implementation of a negotiated number of BMPs. Instead of looking at precise percentage numbers, the rules could look at how to translate the requirements. She noted that this is only one approach to a number of ideas being discussed by DWQ. She noted that the rules can not specifically state that source reductions will be reduced by the amount that they contribute because this would require the closing of all wastewater treatment plants within the region.

Ms. Szlosberg noted that wastewater treatment plants are contributing up to 70% of the nutrients and to ask them to reduce by 70% would be impractical. Ms. Smith noted that although she can't confirm the numbers, this is the basic concept.

Ms. Smith reminded the committee that DWQ has been mandated by the legislature to complete this program and they want to do so in a way that is reasonable and cost-effective for the benefits achieved. Ms. Szlosberg noted the complexity of this issue and thanked DENR for working with DOT in identifying solutions.

Ms. Szlosberg introduced the next agenda item, NCDOT's Ferry Division Environmental Management System, by welcoming Jack Cahoon, Director of the Ferry Division, to discuss his divisions commitment to environmental stewardship. Mr. Cahoon stated that he is very excited to finally showcase the Ferry Division's Environmental Management System (EMS). He introduced Lance Winslow, the new Environmental Officer at the Ferry Division and also introduced Beth Thomas, who was instrumental in getting the EMS to it's current state of implementation. Ms. Thomas presented the details of their EMS. He also noted that an oversight committee has been appointed to help with the continuation of the EMS and assist Mr. Winslow.

Ms. Thomas introduced herself and opened by noting that her presentation would provide an overview of the Ferry Division's EMS, the benefits and challenges, and their accomplishments. She noted that their EMS standard was based on the ISO 14001 model and is a tool to improve

environmental performance. She further noted that an EMS is a systematic way of managing an organization's environmental affairs, addresses immediate and long-term impacts of its products, services and processes on the environment, addresses environmental concerns through the allocation of resources, assignment of responsibility and ongoing evaluation of practices, procedures and processes, and focuses on continual improvement of the system.

Ms. Thomas discussed some of the benefits that were a part of their defined scope, which was dredging and fueling operations of the Ferry Division. The benefits included operational controls, legal requirements that were documented in one central location, monitoring and measuring tools that were created providing checks and balances, additional responsibility, employee involvement enhanced through newsletters, and an overall improvement in communication.

She noted that the EMS model is a continuous model for improvement (also known as "plan-do-check-act"). The five-step EMS model includes an environmental policy, planning, implementation and operation, checking and management review.

She stated that the starting point for the Ferry Division EMS came with the implementation of an Environmental Policy. This is a policy statement of commitment to implement and improve an organization's environmental management in order to maintain and improve environmental performance. It's based upon which objectives and targets are set and was developed at the same time the EMS aspects and impacts were developed.

The planning step of the EMS includes the identification of environmental aspects, the legal and other requirements, and the objectives, targets, and programs. Ms. Thomas referred to a diagram that illustrated the process within the planning stage of an EMS. The implementation and operations stage of an EMS includes the identification of resources, roles, responsibility, and authority; competence, training and awareness; communication; documentation and control of documents; operational control; and emergency preparedness and response. The checking stage of an EMS includes a step for monitoring and measurement, evaluation of compliance, any nonconformity, corrective action and preventive actions, a control of records and an internal audit. The final stage of EMS implementation is management review. This includes a review of the system twice a year by upper management and includes a review of all the EMS implementation stages and is the appropriate time for changes to be identified.

Ms. Thomas noted that the Ferry Division is very excited to inform the committee that they have successfully implemented an ISO 14001: 2004 conformant Environmental Management System, had a successful third party conformance audit in March 2007 and have hired a full-time Environmental Supervisor. In addition to the accomplishments, they plan to continue to improve and expand the EMS throughout the Ferry System. She elaborated that the entire Ferry Division is very proud to have successfully implemented an EMS.

She noted that some of the challenges of implementing the EMS have been a lack of knowledge on EMS, the "buy-in" to implementing an EMS, the initial time commitment required, and the logistics of implementing a program throughout Ferry Division which is located across the entire North Carolina coast. She commented that the Department's Office of Environmental Quality had a very

supportive role in assisting the Ferry Division with EMS knowledge and project management. She concluded by accepting questions on their EMS.

Board Member Nancy Dunn asked for elaboration on specific examples that have been implemented because of the EMS. Ms. Thomas responded that specific standard operating procedures have been developed based on dredging activities, as opposed to job descriptions. She also noted that specific training has been developed and delivered to all staff. Mr. Cahoon elaborated that the fueling component of the Ferry Division has greatly improved with the EMS. They now have specific fuel reports that identify where every gallon of fuel goes within the Ferry Division. He also noted the improved record keeping and monitoring of the water turbidity during dredging activities.

Deputy Secretary for Transit, Roberto Canales, noted that another key achievement was briefing senior managers, including himself, on the process and many stages of the EMS so that the third party audit could be completed successfully. He noted that it's a top to bottom and bottom to top process to implement an EMS. Ms. Thomas noted another unexpected benefit of the EMS implementation was to know that the environment is going to be better off as a result and to see Ferry Division staff become more aware and conscious of environmental aspects, which they may not have been beforehand.

Board Member Andrew Perkins asked whether the audit is set up to be performed in-house or by an external group. Ms. Thomas noted that it is currently set up for internal audits (or in-house). Mr. Cahoon elaborated that once a year an external audit must occur to maintain EMS certification.

Ms. Szlosberg asked whether fuel distribution and consumption was tracked prior to the EMS. Ms. Thomas noted that it was tracked, but with minimal uniformity and organization. Mr. Cahoon elaborated that prior to the EMS implementation fuel was tracked by the amount of fuel that left the pump and now it is also tracked by the amount of fuel actually pumped into each vessel. Prior to the EMS, it was only assumed that the fuel was making it into each ferry or dredge. Ms. Szlosberg noted that this is an increase in accountability of fuel, better efficiency of funds and better stewardship of the environment. Mr. Cahoon also noted that the EMS can also identify any leaks or unfilled space in the fuel tanks by tracking the amounts received.

Ms. Szlosberg congratulated the Ferry Division for their hard work in implementing a complex and successful EMS. Ms. Thomas thanked the committee for allowing her to present and to share the Ferry Division's EMS. Board Member Nancy Dunn reiterated congratulations to the Ferry Division and noted that it is truly a model for DOT.

Ms. Julie Hunkins, Director of the Office of Environmental, NCDOT, briefly commented that the Office of Environmental Quality has developed an "EMS framework" that can assist interested organizational units within the department develop an EMS. It is based on the process used to develop the Ferry Division's EMS. This framework document serves as a template for various groups within DOT to use if they would like to pursue an environmental management system. Currently, the waste and energy management programs, led by Kathleen Stahl and John Sharp in Facilities Management, are beginning to develop EMSs. The EMS guidance is only voluntary, and the Office of Environmental Quality can serve as a resource if requested. Ms. Szlosberg asked

whether an EMS overview has been provided throughout the highway divisions. Ms. Hunkins commented that she presented this information at an Operations Staff meeting, and some divisions are knowledgeable and have received EMS information. The Office of Environmental Quality will provide further information and additional guidance upon request.

Ms. Szlosberg noted that there may be an opportunity to have this conversation with other divisions. Seeing no further questions or comments, Ms. Szlosberg accepted a motion to adjourn the meeting.

The next meeting for the Environmental Planning and Policy Committee is scheduled for Wednesday, September 5, 2007 at 8:30 AM in the Board of Transportation Room (Room 150) of the Transportation Building.

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